

Richard Nault

184 Aylmer Ave. Ottawa ON K1S 2Y6
613-878-8078
Email – rick.nault@gmail.com

Skills

Cartographic Design and Visualization

- Ability to describe and effectively apply map design principles in the creation of thematic map products.
- Ability to effectively discuss the various categories of thematic maps and their strengths and weaknesses and choose the appropriate thematic map type for a given set of information.
- A unique eye for map element balance and aesthetics.

Database Design and Management

- Familiarity with the three-schema architecture for database development.
- Familiarity with entity-relationship model (E-R) and its use in modeling data.
- Ability to use logical database design principles to transform a data model to a set of relations.
- Ability to use SQL to create, populate and modify a database.
- Ability to effectively use PL/pgSQL to process data.
- Ability to use PostGIS to define, populate and execute SQL-based, spatial queries.

GIS Customization

- Experience with the Python scripting language within the ArcGIS 9.x and ArcGIS 10 environments.
- Experience with the ArcPy site package for ArcGIS 10.
- Experience with the C# programming language.

Remote Sensing

- Ability to effectively apply the principles of multispectral, thermal, and hyperspectral remote sensing.
- Experience with microwave remote sensing (Lidar, radar).
- Experience with the use of techniques such as Principal Components Analysis (PCA) to reduce data redundancy in remotely sensed imagery.
- Ability to appropriately apply advanced digital image processing techniques. (e.g. tasseled cap transform, Fourier transforms, NDVI, etc.)
- Ability to effectively perform digital image classification. (e.g. supervised, unsupervised and hybrid classification methods)
- Ability to describe and implement the principals of digital change detection analysis.

Web-based GIS

- Ability to create static and dynamic web pages.
- Ability to integrate interactive map layers into a web page.
- Ability to prepare geographic data for optimal use in WebGIS applications.
- Ability to apply design principles to create hard-copy maps and/or digital map displays which show information clearly and concisely.
- Experience with HTML and JavaScript.

Software

- Extensive experience with ESRI's ArcGIS 9.x and 10 software, including ArcMap and extensions, ArcCatalog, and ArcScene.
- Experience with AutoCAD.
- Experience with Microstation
- Experience with open source GIS software, such as Grass GIS and Quantum GIS (QGIS).
- Experience with a variety of remote sensing software, include ENVI, PCI Geomatica, and Idrisi.
- Experience with object-relational database systems, such as PostgreSQL and PostGIS.
- Experience with 3D-modeling software, such as Google Sketchup.
- Experience image editing software, such as Adobe Photoshop CS5.

Career Experience

Canadian Foundation for the Americas (FOCAL)

Ottawa, ON

Employed as an independent GIS consultant in April – July of 2010. I was contracted to produce a set of thematic migration maps for the “Mapping Knowledge for Development in the Americas” project. The maps can be viewed at the project’s website at <http://www.mappingmigration.com/>.

Algonquin College, Strategic Programs and Services

Ottawa, ON

Contracted in June 2011 to produce a set of 3D models of various buildings around the Algonquin College campus. The models were produced for Google Earth in Google Sketchup.

Nav Canada

Ottawa, ON

Currently employed as a GIS Specialist. The job entails the production of topographic maps for the VFR Topography project. 1:500,000 scale maps are produced through a series of stages (i.e. hydrography, contours, cultural features, labeling, etc) using Microstation as the primary software.

Education

2003-2009

Carleton University

Honours Bachelor of Arts - Geomatics

Ottawa, ON

2010-2011

Algonquin College

Post-Graduate Diploma in Geographic Information Systems

Ottawa, ON

References

Tania Shephard

Project Manager
Mapping Knowledge for Development in the Americas
Email: toomey74@hotmail.com or
tshephard@focal.ca
Tel: 613-327-3261

David Broscoe

Professor, GIS Graduate Certificate
Algonquin College
1385 Woodroffe Ave Ottawa, ON K2G 1V8
Tel: 613 727-4723 x 3350
Email: david.broscoe@algonquincollege.com
www.algonquincollege.com/gis

Réal Gauvreau

Supervisor, VFR Topography Project
NAV CANADA
1601 Tom Roberts Avenue
Ottawa, ON K1V 1E5
Email: gauvrre@navcanada.ca
Phone: (613) 248-4082